

ABSTRACT

5 A europium-activated barium aluminate phosphor is described wherein the phosphor is doped with tetravalent ions of Hf, Zr, or Si. Preferably, the phosphor is represented by $(\text{Ba}_{1-x}\text{Eu}_x)\text{MgAl}_{10}\text{O}_{17}:(\text{Hf},\text{Zr},\text{Si})_y$ where $0.05 \leq x \leq 0.25$ and $0 < y \leq 0.05$. The tetravalent dopant ions are shown to enhance the stability of the phosphor in UV/VUV applications.